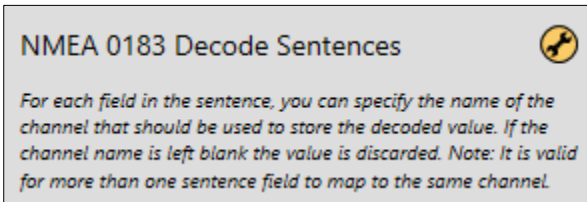


NMEA 0183 overview

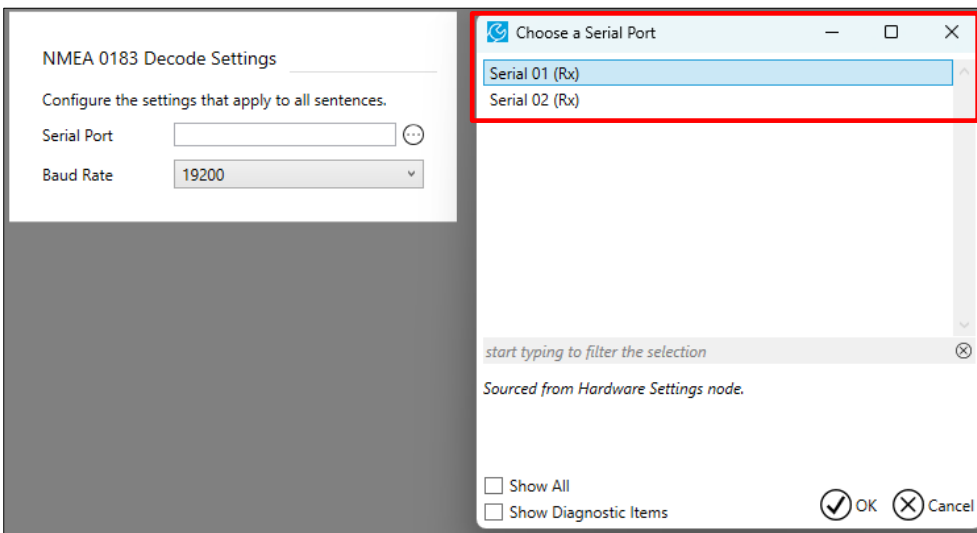
The NMEA 0183 Decode node is used to configure a GPS input.

Configure a GPS Input

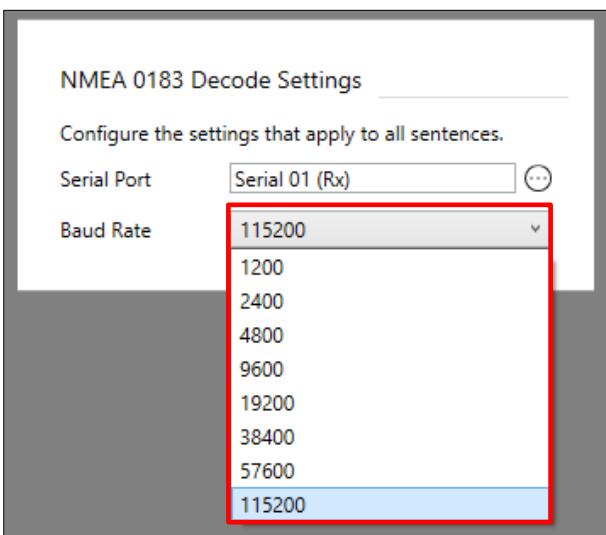
Open the NMEA 0183 Decode node and the 'wrench' tool to setup the GPS input



Select the **Serial Port** to which the GPS is connected.



Next, select the **Baud Rate** for the GPS input from the dropdown menu.



You can then click the check boxes to select the NMEA sentences to be decoded (1). You can edit the channel names as required (2).

NMEA 0183 Decode Sentences

For each field in the sentence, you can specify the name of the channel that should be used to store the decoded value. If the channel name is left blank the value is discarded. Note: It is valid for more than one sentence field to map to the same channel.

- DBT - Depth Below Transducer
- DPT - Depth
- GGA - Global Position Fix
- GLL - Geographic Position
- HDG - Heading, Deviation & Variation
- HDM - Heading, Magnetic
- HDT - Heading, True
- MTA - Air Temperature
- MTW - Water Temperature
- MWD - Wind Direction & Speed
- MWV - Wind Speed & Angle
- RMB - Navigation Information
- RMC - Recommended Minimum GNSS Data
- VHW - Water Speed & Heading
- VLW - Dual Ground & Water Distance
- VPW - Speed Parallel To Wind
- VTG - Ground Course & Speed
- VWR - Apparent Wind Speed & Direction
- VWT - True Wind Speed & Direction
- XTE - Measured Cross Track Error
- ZTG - Time To Destination Waypoint

Decode GLL - Geographic Position?

Latitude

Longitude

Time (UTC)

GPS status

GPS mode

- NMEA RX GLL Latitude
- NMEA RX GLL Longitude
- NMEA RX GLL UTC Time
- NMEA RX GLL Status
- NMEA RX GLL Mode

Once you select the NMEA sentences, the channels are displayed on the **Channel Rates** node. You must set the channel logging rate for the data to be logged (1).



Channel Rates	
Channels	Logger 0 : Rate Group 0 <input type="radio"/>
	SS <input type="text"/>
	HS <input type="text"/>
NMEA RX GLL Latitude	Off <input type="checkbox"/>
NMEA RX GLL Longitude	Off <input type="checkbox"/>
NMEA RX GLL Mode	1 Hz <input type="checkbox"/>
NMEA RX GLL Status	2 Hz <input type="checkbox"/>
NMEA RX GLL UTC Time	5 Hz <input type="checkbox"/>
NMEA RX HDM Heading	10 Hz <input type="checkbox"/>
NMEA RX HDT Heading	Off <input type="checkbox"/>
NMEA RX VTG Course	Off <input type="checkbox"/>
NMEA RX VTG Course Mag	Off <input type="checkbox"/>
NMEA RX VTG Mode	Off <input type="checkbox"/>
NMEA RX VTG Speed Ground	Off <input type="checkbox"/>

